

Recommended Storage Conditions for Air Samplers Prior to Use

(Assay Technology, CR Manning, 13 September 2013)

Certain products manufactured by Assay Technology are labeled “Store under Refrigeration” to protect products from degradation that may arise from heat exposure. In such cases, heat exposure arising from climate will not render the sampler inoperative, but may induce greater variance (inaccuracy) in final test results.

The increase in variation induced in samplers by temperature exposure is a complex function of the exposure temperature and the time of exposure at each temperature. Such behavior is simulated in stability studies where sampler performance is studied after prolonged exposure at controlled room temperature (15-30°C) compared to storage under refrigeration (2-8°C). When samplers tested after prolonged controlled room temperature exposure show greater variation than samplers stored under refrigeration, the “Store under Refrigeration” label has been selected.

Such studies do not suggest that samplers will be immediately degraded upon removal from the refrigerator. Rather, they suggest that sampler variation will be minimized if samplers are kept under refrigeration as much as possible prior to use.

The following “thumb rules” are provided to guide clients in handling Assay Technology products labeled “Store under Refrigeration”:

A short-term temperature excursion up to one month at controlled room temperature (60-86°F) experienced once in the life of the product (prior to use) will be unlikely to cause detectable degradation of product performance.

A short-term temperature excursion up to one week at climatic temperatures (0-100°F) experienced once in the life of the product (prior to use) will be unlikely to cause detectable degradation of product performance.

Temperature excursions above 100°F should be avoided.